

2393

**ACTION MEMORANDUM: DIRECTION TO
INITIATE PUMPING AND TREATMENT
ACTIVITIES FOR PERCHED GROUNDWATER AT
THE FMPC**

04/19/91

**DOE-1159-91
DOE-FSO/WMCO
3
LETTER**



Department of Energy

FMPC Site Office

P.O. Box 398705
Cincinnati, Ohio 45239-8705
(513) 738-6319

2393

APR 19 1991

DOE-1159-91

Mr. W. H. Britton, President
Westinghouse Materials Company
of Ohio
P.O. Box 398704
Cincinnati, Ohio 45239-8704

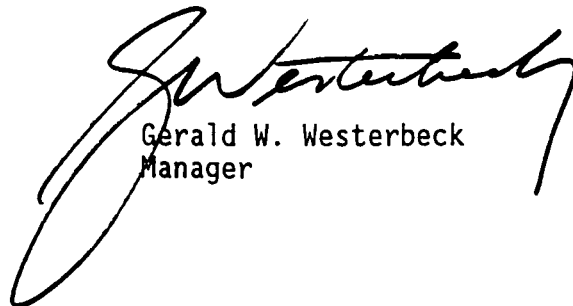
Dear Mr. Britton:

**ACTION MEMORANDUM: DIRECTION TO INITIATE PUMPING AND TREATMENT ACTIVITIES FOR
PERCHED GROUNDWATER AT THE FMPC**

The CERCLA Removal Action Work Plans addressing perched water at the FMPC have been prepared and approved. Final U.S. EPA approval of the Perched Water Work Plans was obtained after an informal dispute resolution process on October 31, 1990. WMCO is directed to proceed with the implementation of the approved CERCLA Removal Action Work Plans (see Enclosure I). WMCO should also perform an Operational Readiness Review (ORR) before operating the extraction and treatment systems.

If your staff has any questions, please ask them to contact Andy Avel at extension 6161.

Sincerely,



Gerald W. Westerbeck
Manager

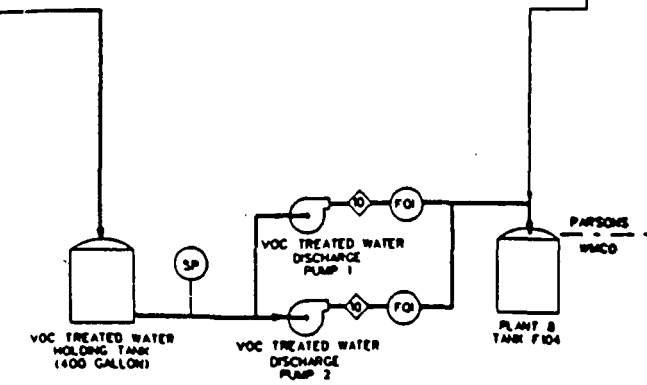
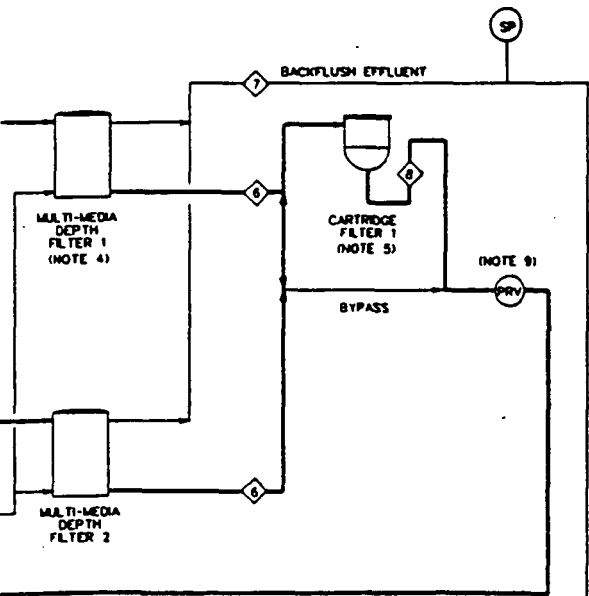
FSO:Craig

Enclosure: As stated

cc w/encl.:

B. Wright, EM-423, GTN
H. F. Daugherty, WMCO
J. P. Hopper, WMCO
P. C. Weddle, WMCO

5	6	7	8
10			
4800			
4,413			
17			
1.0			
0.04			
0.01			
0.01			
0.01			
0.04			
0.82			
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159.0			
12.5			
13.0			
94.0			
94.8			
155.0			
00.0			
26.3			
20.0			
1.2			



- NOTES
1. DATA WERE OBTAINED FROM "SELECTED SAMPLE RESULTS FOR THE PERCHED WATER BORINGS" (WACO, 1991) "FMPC WASTE WATER OVERVIEW" (WACO, 1991) AND HAZARDOUS SUBSTANCES LIST DATA FROM INTERNATIONAL TECHNOLOGY (IT) CORP. ANALYSES. PERCHED WATER PH RANGES FROM 6 TO 7, CONDUCTIVITY RANGES FROM 0.2 TO 1.7 MICROMHOS PER CUBIC CENTIMETER.
 2. AVERAGES OF WELL CONCENTRATIONS WERE ASSUMED FOR PLANT 6 WELLS WITH NO DATA.
 3. THE DESIGN FLOW PER DAY IS BASED ON 8 HOURS OPERATION.
 4. DEPTH FILTERS ARE TWO 100 PERCENT CAPACITY UNITS. IN THE ABSENCE OF TEST DATA, EFFICIENCY FOR REMOVAL OF TOTAL SUSPENDED SOLIDS (TSS) IS ASSUMED AT 80 PERCENT.
 5. CARTRIDGE FILTER EFFICIENCY FOR REMOVAL OF TSS IS ASSUMED AT 95 PERCENT.
 6. GRANULAR ACTIVATED CARBON ADSORPTION UNITS ARE TWO 50 PERCENT CAPACITY TRANS (CONSISTING OF ONE LEAD UNIT AND ONE LAG UNIT), WITH AN ASSUMED 99 PERCENT EFFICIENCY FOR REMOVAL OF VOLATILE ORGANIC COMPOUNDS (VOC'S).
 7. NUMBERS INDICATE WELL BORINGS. EACH WELL HAS ITS OWN PUMP (NOT SHOWN).
 8. PLANT 6 WELLS, HOLDING TANK AND PUMP BY WACO.
 9. PRESSURE REDUCING VALVE WILL REDUCE PRESSURE TO < 7.5 PSIG WHICH IS MAXIMUM ALLOWABLE FOR ACTIVATED CARBON ADSORPTION UNITS.
 10. BACKFLUSH SUPPLY WATER MINIMUM PRESSURE IS 40 PSIG.
 11. BACKWASH VOLUME IS BASED ON AN ASSUMED ONE (1) BACKWASH PER DAY AT 375 GALLONS PER BACKWASH. THE BACKWASH CYCLE INCLUDES A RINSE OF 100 GALLONS (4 MINUTES AT 25 GPM) WHICH DISCHARGES THROUGH THE PROCESS LINE. THE RINSE IS NOT INCLUDED IN THE PROCESS FLOW.

SYMBOLS

- (SP) SAMPLE POINT
 - (FCV) FLOW CONTROL VALVE
 - (PRV) PRESSURE REDUCING VALVE
 - (FOI) FLOW INDICATOR/TOTALIZER
 - (FE) FLOW ELEMENT
- PARSONS
WACO
- DESIGN INTERFACE

0		ISSUED FOR CONSTRUCTION		DATE	ISSUED BY	DATE												
REV		DESCRIPTION		DATE	ISSUED BY	DATE												
<p align="center">UNITED STATES DEPARTMENT OF ENERGY FEED MATERIALS PRODUCTION CENTER</p> <p align="center">DESIGN PREPARED BY PARSONS</p> <p align="center">THE RALPH M. PARSONS CO. • ONE S. 7 MAIN, INC. • ENGINEERING SCIENCE, INC. CINCINNATI, OHIO</p> <p align="center">PROJECT NAME FMPC ERA OPERABLE UNIT 3</p> <p align="center">DRAWING TITLE PROCESS FLOW DIAGRAM PERCHED WATER REMOVAL ACTIONS PLANTS 2/3, 6, 8, 9</p> <table border="1"> <tr> <td>DESIGNED BY R.D. PROHN</td> <td>DATE 2-6-91</td> <td>DESIGNED BY</td> <td>DATE</td> <td>CHECKED BY</td> <td>DATE</td> </tr> <tr> <td>REVIEWED BY 2/3, 6, 8, 9</td> <td>DATE</td> <td>REVIEWED BY</td> <td>DATE</td> <td>REVIEWED BY</td> <td>DATE</td> </tr> </table> <p>APPROVED FOR SUBMITTAL</p> <p>BY D.O.E. LATER</p> <p>93X5900F00017</p> <p>F001 0</p>							DESIGNED BY R.D. PROHN	DATE 2-6-91	DESIGNED BY	DATE	CHECKED BY	DATE	REVIEWED BY 2/3, 6, 8, 9	DATE	REVIEWED BY	DATE	REVIEWED BY	DATE
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